

Access DB# 183422

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Nicholas Ogden, Jr Examiner #: 7146 Date: 3/28/06
Art Unit: 1751 Phone Number: 2122 Serial Number: 10/53, 417
Mail Box and Bldg/Room Location: 9431 Results Format Preferred (circle): PAPER DISK E-MAIL
Remsen

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Detergent Composition

Inventors (please provide full names): Gilks, Bettington, Pamy, Rogers

Earliest Priority Filing Date: 1/16/03

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please. Search the claimed Detergent comp
for the specific polymer (component (c)).
(claim) * Graft Polymer having a
Locust bean gum backbone and grafts of an
aromatic sulphonic acid or
* Locust bean gum - graft - poly (4-styrenesulphonic
acid).
(claim 5)

SCIENTIFIC REFERENCE BR
Sci & Tech Inf - Cntr

MAR 28 2006

Pat. & T.M. Office

STAFF USE ONLY

Searcher: 244 Type of Search Vendors and cost where applicable
NA Sequence (#) STN \$655,96
Searcher Phone #: _____ AA Sequence (#) Dialog _____
Searcher Location: _____ Structure (#) Questel/Orbit _____
Date Searcher Picked Up: _____ Bibliographic ☒ Dr. Link _____
Date Completed: 3/28/06 Litigation _____ Lexis/Nexis _____
Searcher Prep & Review Time: 30 Fulltext _____ Sequence Systems _____
Clerical Prep Time: 30 Patent Family _____ WWW/Internet _____
Online Time: 165 Other _____ Other (specify) _____



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Bib Data Sheet

CONFIRMATION NO. 7488

SERIAL NUMBER 10/759,417	FILING DATE 01/16/2004 RULE	CLASS 510	GROUP ART UNIT 1751	ATTORNEY DOCKET NO. C4288(C)	
APPLICANTS Christopher David Gibbs, Bebington, UNITED KINGDOM; Alyn James Parry, Bebington, UNITED KINGDOM; Susanne Henning Rogers, Bebington, UNITED KINGDOM; ** CONTINUING DATA ***** ** FOREIGN APPLICATIONS ***** UNITED KINGDOM 0301022.0 01/16/2003 IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 04/21/2004					
Foreign Priority claimed <input type="checkbox"/> yes <input type="checkbox"/> no 35 USC 119 (a-d) conditions <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Met after met Allowance Verified and Acknowledged _____ Examiner's Signature Initials		STATE OR COUNTRY UNITED KINGDOM	SHEETS DRAWING 0	TOTAL CLAIMS 8	INDEPENDENT CLAIMS 2
ADDRESS 000201 UNILEVER INTELLECTUAL PROPERTY GROUP 700 SYLVAN AVENUE, BLDG C2 SOUTH ENGLEWOOD CLIFFS , NJ 07632-3100					
TITLE Detergent compositions					
FILING FEE	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT		<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of time)		

1-16-83

734299

10/75 4/17 - 23 -

1-22 10/484,352 - dv and
(claims) Supt and buildCLAIMS

1 A built laundry detergent composition comprising

5

(a) from 5 to 60 wt% of an organic detergent surfactant selected from anionic, nonionic, cationic, zwitterionic and amphoteric surfactants and combinations thereof,

10 (b) from 10 to 80 wt% of a detergency builder,

(c) from 0.1 to 10 wt% of a graft polymer having a locust bean gum backbone and grafts of an aromatic sulphonic acid,

15 (d) optionally other detergent ingredients to 100 wt%.

2 A detergent composition as claimed in claim 1, wherein the laundry detergent composition is a granular or
20 particulate composition.

3 A detergent composition as claimed in claim 1, wherein the laundry detergent composition is a liquid.

25

4 A particulate laundry detergent composition comprising

(a) from 5 to 60 wt% of an organic detergent surfactant selected from anionic, nonionic, cationic, zwitterionic and
30 amphoteric surfactants and combinations thereof,

(b) optionally from 0 to 80 wt% of a detergency builder,

(c) from 0.1 to 10 wt% of a graft polymer having a locust bean gum backbone and grafts of an aromatic sulphonic acid,

5

(d) optionally other detergent ingredients to 100 wt%.

5 A laundry detergent composition as claimed in either
10 claim 1 and/or claim 4, wherein the graft polymer is locust
bean gum - graft - poly(4-styrenesulphonic acid).

6 A detergent composition as claimed in either claim 1
15 and/or claim 4, wherein the organic detergent surfactant (a)
comprises an anionic sulphonate or sulphonate surfactant
optionally in admixture with one or more cosurfactants
selected from ethoxylated nonionic surfactants, non-
ethoxylated nonionic surfactants, ethoxylated sulphate
20 anionic surfactants, cationic surfactants, amine oxides,
alkanolamides and combinations thereof.

7 A detergent composition as claimed in either claim 1
25 and/or claim 4, which comprises a detergency builder (b)
selected from zeolites, phosphates, and citrates.

8 A detergent composition as claimed in either claim 1
and/or claim 4, wherein the laundry detergent composition
30 comprises other detergent ingredients (d) selected from
bleach ingredients, enzymes, sodium carbonate, sodium

101 102
silicate, sodium sulphate, foam controllers, foam boosters,
perfumes, fabric conditioners, soil release polymers, dye
transfer inhibitors, photobleaches, fluorescers and coloured
speckles.

=> d his ful

(FILE 'HOME' ENTERED AT 14:29:40 ON 28 MAR 2006)

FILE 'HCAPLUS' ENTERED AT 14:29:50 ON 28 MAR 2006

E US20040152619/PN
 L1 1 SEA ABB=ON PLU=ON US20040152619/PN
 D ALL
 SEL RN

FILE 'REGISTRY' ENTERED AT 14:31:58 ON 28 MAR 2006
 L2 7 SEA ABB=ON PLU=ON (1344-09-8/BI OR 2052-01-9/BI OR
 497-19-8/BI OR 727730-06-5/BI OR 727737-90-8/BI OR
 7757-82-6/BI OR 9000-40-2/BI)
 D SCAN
 D L2 1-7 RN STR
 D L2 1-2 CRN STR
 L3 1 SEA ABB=ON PLU=ON 727730-06-5/RN
 D SCAN
 L4 1 SEA ABB=ON PLU=ON 9000-40-2/RN
 D SCAN
 L5 58 SEA ABB=ON PLU=ON 9000-40-2/CRN
 L6 1655 SEA ABB=ON PLU=ON 98-70-4/CRN
 L7 2 SEA ABB=ON PLU=ON L5 AND L6
 D SCAN
 L8 1 SEA ABB=ON PLU=ON 727737-90-8/RN
 D SCAN
 L9 376 SEA ABB=ON PLU=ON 79-31-2/CRN
 L10 1 SEA ABB=ON PLU=ON L9 AND L5
 D SCAN
 E GALACTOMANNAN/CN
 L11 1 SEA ABB=ON PLU=ON GALACTOMANNAN/CN
 D SCAN
 D RN
 L12 1 SEA ABB=ON PLU=ON 11078-30-1/RN
 D SCAN
 L13 45 SEA ABB=ON PLU=ON 11078-30-1/CRN
 E GALACTOMANNAN/CN
 E GALACTOMANNAN/CNS
 L14 29 SEA ABB=ON PLU=ON GALACTOMANNAN/CNS
 E POLYSACCHARIDE/CN
 E POLYSACCHARIDE/CNS
 L15 2400 SEA ABB=ON PLU=ON POLYSACCHARIDE/CNS
 E POLYSACCHARIDE/CN
 E 26
 E POLYSACCHARIDE/CN
 E POLYSACCHARIDE 1/CN
 L16 0 SEA ABB=ON PLU=ON L14 AND L15
 E ?POLYSACCHAR?/CN
 E ?POLYSACCHAR?/CNS
 L17 3738 SEA ABB=ON PLU=ON ?POLYSACCHAR?/CNS
 L18 38 SEA ABB=ON PLU=ON ?GALACTOMAN?/CNS
 L19 0 SEA ABB=ON PLU=ON L18 AND L17

FILE 'HCAPLUS' ENTERED AT 14:56:01 ON 28 MAR 2006

D SCAN L1
 L20 3040 SEA ABB=ON PLU=ON LOCUST? (3A) BEAN? (3A) GUM?
 L21 5 SEA ABB=ON PLU=ON L20 (2A) (GRAFT? (A) POLYM?)
 D SCAN
 L22 5 SEA ABB=ON PLU=ON L20 (3A) (GRAFT? (A) POLYM?)
 E DETERGENT/CT
 E E4 +ALL
 L23 4107 SEA ABB=ON PLU=ON DETERGENT? (2A) BUIL?
 E DETERGENT/CT
 L24 1270 SEA ABB=ON PLU=ON L23 AND LAUNDR?
 L25 8885 SEA ABB=ON PLU=ON DETERG? (3A) LAUNDR?

L26 1224 SEA ABB=ON PLU=ON L25. AND L23
 L27 226675 SEA ABB=ON PLU=ON SURFACT?
 L28 79308 SEA ABB=ON PLU=ON L27(5A) (ANION? OR CATION? OR
 NONION? OR ZWITTER? OR AMPHOTER?)
 L29 453 SEA ABB=ON PLU=ON L28 AND L26
 L30 2221 SEA ABB=ON PLU=ON L14
 L31 2107 SEA ABB=ON PLU=ON L12
 L32 3181 SEA ABB=ON PLU=ON L12 OR GALACTOMANNAN?

FILE 'REGISTRY' ENTERED AT 15:16:32 ON 28 MAR 2006
 E POLYSACCHARIDE/CN
 E POLYSACCHARID/CN

FILE 'HCAPLUS' ENTERED AT 15:19:10 ON 28 MAR 2006
 L33 2408 SEA ABB=ON PLU=ON L18
 L34 3387 SEA ABB=ON PLU=ON L33 OR GALACTOMANNAN?
 L35 304992 SEA ABB=ON PLU=ON L17
 L36 374348 SEA ABB=ON PLU=ON L35 OR POLYSACCHARID?
 L37 1263 SEA ABB=ON PLU=ON L35(2A) L36
 D QUE
 L38 229 SEA ABB=ON PLU=ON POLYSACCHARIDE(2A) (BACKBONE OR
 BACK(W) BONE)
 L39 11 SEA ABB=ON PLU=ON L38 AND L32
 D SCAN
 L40 0 SEA ABB=ON PLU=ON L39 AND L26
 L41 11 SEA ABB=ON PLU=ON L38 AND L32
 L42 28 SEA ABB=ON PLU=ON L34 AND L37
 D QUE
 L43 12 SEA ABB=ON PLU=ON L38 AND L34
 L44 12 SEA ABB=ON PLU=ON L38 AND (L34 OR L32)
 L45 12302 SEA ABB=ON PLU=ON BETA(4A) LINK?
 L46 5 SEA ABB=ON PLU=ON L45 AND L44
 D L46 1-5 KWIC
 L47 0 SEA ABB=ON PLU=ON L46 AND L29
 D SCAN L46
 L48 953 SEA ABB=ON PLU=ON L28 AND L23

FILE 'REGISTRY' ENTERED AT 15:53:01 ON 28 MAR 2006
 D SCAN L4
 D L4 IDE

FILE 'HCAPLUS' ENTERED AT 15:54:51 ON 28 MAR 2006
 L49 3 SEA ABB=ON PLU=ON L7
 L50 2 SEA ABB=ON PLU=ON L3
 L51 89 SEA ABB=ON PLU=ON L5
 L52 2952 SEA ABB=ON PLU=ON L6
 L53 4 SEA ABB=ON PLU=ON L51 AND L52
 L54 4 SEA ABB=ON PLU=ON L49 OR L50 OR L53
 L55 5 SEA ABB=ON PLU=ON L20(3A) (BACKBONE OR BACK(W) BONE)
 L56 24 SEA ABB=ON PLU=ON L20(L) (BACKBONE OR BACK(W) BONE)
 L57 33 SEA ABB=ON PLU=ON L20 AND (BACKBONE OR BACK(W) BONE)
 L58 25 SEA ABB=ON PLU=ON AROMAT?(3A) SULPHON?(3A) ACID
 L59 0 SEA ABB=ON PLU=ON L22 AND L58
 L60 0 SEA ABB=ON PLU=ON L58 AND L20
 L61 815 SEA ABB=ON PLU=ON SULPHON?(A) ACID
 L62 25 SEA ABB=ON PLU=ON AROMATIC(3A) L61
 L63 75 SEA ABB=ON PLU=ON AROMATIC(L) L61
 L64 0 SEA ABB=ON PLU=ON L63 AND L20
 L65 0 SEA ABB=ON PLU=ON L61 AND L20
 L66 59 SEA ABB=ON PLU=ON (L53 OR L54 OR L55 OR L56 OR L57
 OR L58)
 L67 2 SEA ABB=ON PLU=ON L66 AND L26
 D SCAN
 D QUE STAT
 L68 7 SEA ABB=ON PLU=ON L54 OR L55 OR L67
 L69 40 SEA ABB=ON PLU=ON L39 OR (L41 OR L42 OR L43 OR L44)

OR L46

L70 0 SEA ABB=ON PLU=ON L69 AND L48

L71 0 SEA ABB=ON PLU=ON L69 AND L26

L72 0 SEA ABB=ON PLU=ON L69 AND L23

L73 2 SEA ABB=ON PLU=ON L69 AND L28

L74 9 SEA ABB=ON PLU=ON L68 OR L73

L75 254 SEA ABB=ON PLU=ON GALACTOMANNAN(2A) POLYSACCHARIDE

L76 0 SEA ABB=ON PLU=ON L75 AND L48

L77 0 SEA ABB=ON PLU=ON L75 AND L23

L78 3 SEA ABB=ON PLU=ON L75 AND L28

D SCAN

L79 10 SEA ABB=ON PLU=ON L74 OR L78

D QUE L66

L80 1 SEA ABB=ON PLU=ON L66 AND L48

D SCAN

L81 10 SEA ABB=ON PLU=ON L79 OR L80

FILE 'REGISTRY' ENTERED AT 16:22:56 ON 28 MAR 2006

L82 1 SEA ABB=ON PLU=ON 98-70-4/RN

D SCAN

D IDE

FILE 'HCAPLUS' ENTERED AT 16:23:51 ON 28 MAR 2006

L83 2 SEA ABB=ON PLU=ON L3/P OR L3/DP

D SCAN

L84 97 SEA ABB=ON PLU=ON L82

L85 0 SEA ABB=ON PLU=ON L84 AND L4

L86 6 SEA ABB=ON PLU=ON (ANION? OR L27) (2A)SULPHONAT?

L87 0 SEA ABB=ON PLU=ON L86 AND L48

L88 0 SEA ABB=ON PLU=ON L86 AND L81

L89 QUE ABB=ON PLU=ON ZEOLIT? OR PHOSPHAT? OR CITRAT?

L90 7640 SEA ABB=ON PLU=ON L28 AND L89

L91 2 SEA ABB=ON PLU=ON L90 AND L81

L92 98 SEA ABB=ON PLU=ON L83 OR L81 OR L66 OR L69

L93 2 SEA ABB=ON PLU=ON L92 AND L90

L94 10 SEA ABB=ON PLU=ON L81 OR L83 OR L91 OR L93

L95 3 SEA ABB=ON PLU=ON (GRANUL? OR GRAIN? OR LIQ?) AND

L94

L96 10 SEA ABB=ON PLU=ON L95 OR L94

L97 QUE ABB=ON PLU=ON ETHOX? OR NONETHOX? OR NON(W)ETHOX?

OR ETHOX?(2A) (SULFAT? OR SULPHAT?)

L98 QUE ABB=ON PLU=ON AMINE(A)OXIDE OR ALKANOLAMIDE

L99 2 SEA ABB=ON PLU=ON L96 AND (L97 OR L98)

FILE 'REGISTRY' ENTERED AT 16:48:49 ON 28 MAR 2006

L100 1 SEA ABB=ON PLU=ON 497-19-8/RN

D SCAN

L101 1 SEA ABB=ON PLU=ON 1344-09-8/RN

D SCAN

L102 1 SEA ABB=ON PLU=ON 7757-82-6/RN

D SCAN

FILE 'HCAPLUS' ENTERED AT 16:50:34 ON 28 MAR 2006

L103 43487 SEA ABB=ON PLU=ON L100

L104 132767 SEA ABB=ON PLU=ON L103 OR (SODIUM OR NA) (A) (CARBONATE

OR CO3 OR H2CO3) OR NA2CO3 OR NA2(A)H2CO3

L105 26475 SEA ABB=ON PLU=ON L101

L106 46677 SEA ABB=ON PLU=ON L105 OR (SODIUM OR NA) (A)SILICATE

L107 34190 SEA ABB=ON PLU=ON L102

L108 92084 SEA ABB=ON PLU=ON L107 OR (SODIUM OR NA) (A) (SULFATE

OR SULPHATE OR SO4 OR H2SO4) OR NA2SO4

L109 QUE ABB=ON PLU=ON BLEACH? OR ENZYME OR L104 OR L106

OR L108 OR FOAM?(2A) (CONTROL? OR BOOST?)

L110 QUE ABB=ON PLU=ON PERFUME OR FABRIC(2A)CONDITION? OR

SOIL(3A)RELEASE(3A)POLYM? OR FLUORES?

L111 QUE ABB=ON PLU=ON DYE(3A)TRANSFER? (3A)INHIBIT? OR

PHOTBLEACH? OR PHOTO(W)BLEACH? OR (COLOR? OR COLOUR?) (2A) SPECK?

L112 10 SEA ABB=ON PLU=ON L96 OR L99
 L113 3 SEA ABB=ON PLU=ON L112 AND (L109 OR L110 OR L111)
 L114 10 SEA ABB=ON PLU=ON L112 OR L113
 L115 2 S L8
 L116 2 S L10
 L117 1554 S L9
 L118 3267 S L4
 L119 8 S L117 AND (L118 OR L51)
 L120 3 S L119 AND DETERG?
 L121 10 S L120 OR L114 OR L115 OR L116

=> => d que stat 1121

L3 1 SEA FILE=REGISTRY ABB=ON PLU=ON 727730-06-5/RN
 L4 1 SEA FILE=REGISTRY ABB=ON PLU=ON 9000-40-2/RN
 L5 58 SEA FILE=REGISTRY ABB=ON PLU=ON 9000-40-2/CRN
 L6 1655 SEA FILE=REGISTRY ABB=ON PLU=ON 98-70-4/CRN
 L7 2 SEA FILE=REGISTRY ABB=ON PLU=ON L5 AND L6
 L8 1 SEA FILE=REGISTRY ABB=ON PLU=ON 727737-90-8/RN
 L9 376 SEA FILE=REGISTRY ABB=ON PLU=ON 79-31-2/CRN
 L10 1 SEA FILE=REGISTRY ABB=ON PLU=ON L9 AND L5
 L12 1 SEA FILE=REGISTRY ABB=ON PLU=ON 11078-30-1/RN
 L17 3738 SEA FILE=REGISTRY ABB=ON PLU=ON ?POLYSACCHAR?/CNS
 L18 38 SEA FILE=REGISTRY ABB=ON PLU=ON ?GALACTOMAN?/CNS
 L20 3040 SEA FILE=HCAPLUS ABB=ON PLU=ON LOCUST? (3A) BEAN? (3A) GU
 M?
 L23 4107 SEA FILE=HCAPLUS ABB=ON PLU=ON DETERGENT? (2A) BUIL?
 L25 8885 SEA FILE=HCAPLUS ABB=ON PLU=ON DETERG? (3A) LAUNDR?
 L26 1224 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 AND L23
 L27 226675 SEA FILE=HCAPLUS ABB=ON PLU=ON SURFACT?
 L28 79308 SEA FILE=HCAPLUS ABB=ON PLU=ON L27 (5A) (ANION? OR
 CATION? OR NONION? OR ZWITTER? OR AMPHOTER?)
 L32 3181 SEA FILE=HCAPLUS ABB=ON PLU=ON L12 OR GALACTOMANNAN?
 L33 2408 SEA FILE=HCAPLUS ABB=ON PLU=ON L18
 L34 3387 SEA FILE=HCAPLUS ABB=ON PLU=ON L33 OR GALACTOMANNAN?
 L35 304992 SEA FILE=HCAPLUS ABB=ON PLU=ON L17
 L36 374348 SEA FILE=HCAPLUS ABB=ON PLU=ON L35 OR POLYSACCHARID?
 L37 1263 SEA FILE=HCAPLUS ABB=ON PLU=ON L35 (2A) L36
 L38 229 SEA FILE=HCAPLUS ABB=ON PLU=ON POLYSACCHARIDE (2A) (BAC
 KBONE OR BACK(W) BONE)
 L39 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 AND L32
 L41 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 AND L32
 L42 28 SEA FILE=HCAPLUS ABB=ON PLU=ON L34 AND L37
 L43 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 AND L34
 L44 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 AND (L34 OR L32)
 L45 12302 SEA FILE=HCAPLUS ABB=ON PLU=ON BETA(4A) LINK?
 L46 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L45 AND L44
 L48 953 SEA FILE=HCAPLUS ABB=ON PLU=ON L28 AND L23
 L49 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L7
 L50 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L3
 L51 89 SEA FILE=HCAPLUS ABB=ON PLU=ON L5
 L52 2952 SEA FILE=HCAPLUS ABB=ON PLU=ON L6
 L53 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L51 AND L52
 L54 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L49 OR L50 OR L53
 L55 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 (3A) (BACKBONE OR
 BACK(W) BONE)
 L56 24 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 (L) (BACKBONE OR
 BACK(W) BONE)
 L57 33 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 AND (BACKBONE OR

BACK(W)BONE)

L58 25 SEA FILE=HCAPLUS ABB=ON PLU=ON AROMAT? (3A)SULPHON? (3A)
)ACID

L66 59 SEA FILE=HCAPLUS ABB=ON PLU=ON (L53 OR L54 OR L55 OR
L56 OR L57 OR L58)

L67 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L66 AND L26

L68 7 SEA FILE=HCAPLUS ABB=ON PLU=ON L54 OR L55 OR L67

L69 40 SEA FILE=HCAPLUS ABB=ON PLU=ON L39 OR (L41 OR L42 OR
L43 OR L44) OR L46

L73 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L69 AND L28

L74 9 SEA FILE=HCAPLUS ABB=ON PLU=ON L68 OR L73

L75 254 SEA FILE=HCAPLUS ABB=ON PLU=ON GALACTOMANNAN(2A) POLYS
ACCHARIDE

L78 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L75 AND L28

L79 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L74 OR L78

L80 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L66 AND L48

L81 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L79 OR L80

L83 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L3/P OR L3/DP

L89 QUE ABB=ON PLU=ON ZEOLIT? OR PHOSPHAT? OR CITRAT?

L90 7640 SEA FILE=HCAPLUS ABB=ON PLU=ON L28 AND L89

L91 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L90 AND L81

L92 98 SEA FILE=HCAPLUS ABB=ON PLU=ON L83 OR L81 OR L66 OR
L69

L93 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L92 AND L90

L94 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L81 OR L83 OR L91 OR
L93

L95 3 SEA FILE=HCAPLUS ABB=ON PLU=ON (GRANUL? OR GRAIN? OR
LIQ?) AND L94

L96 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L95 OR L94

L97 QUE ABB=ON PLU=ON ETHOX? OR NONETHOX? OR NON(W)ETHOX
? OR ETHOX? (2A) (SULFAT? OR SULPHAT?)

L98 QUE ABB=ON PLU=ON AMINE(A)OXIDE OR ALKANOLAMIDE

L99 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L96 AND (L97 OR L98)

L100 1 SEA FILE=REGISTRY ABB=ON PLU=ON 497-19-8/RN

L101 1 SEA FILE=REGISTRY ABB=ON PLU=ON 1344-09-8/RN

L102 1 SEA FILE=REGISTRY ABB=ON PLU=ON 7757-82-6/RN

L103 43487 SEA FILE=HCAPLUS ABB=ON PLU=ON L100

L104 132767 SEA FILE=HCAPLUS ABB=ON PLU=ON L103 OR (SODIUM OR
NA) (A) (CARBONATE OR CO3 OR H2CO3) OR NA2CO3 OR
NA2(A)H2CO3

L105 26475 SEA FILE=HCAPLUS ABB=ON PLU=ON L101

L106 46677 SEA FILE=HCAPLUS ABB=ON PLU=ON L105 OR (SODIUM OR
NA) (A) SILICATE

L107 34190 SEA FILE=HCAPLUS ABB=ON PLU=ON L102

L108 92084 SEA FILE=HCAPLUS ABB=ON PLU=ON L107 OR (SODIUM OR
NA) (A) (SULFATE OR SULPHATE OR SO4 OR H2SO4) OR NA2SO4

L109 QUE ABB=ON PLU=ON BLEACH? OR ENZYME OR L104 OR L106
OR L108 OR FOAM? (2A) (CONTROL? OR BOOST?)

L110 QUE ABB=ON PLU=ON PERFUME OR FABRIC(2A)CONDITION? OR
SOIL(3A)RELEASE(3A)POLYM? OR FLUORES?

L111 QUE ABB=ON PLU=ON DYE(3A)TRANSFER?(3A)INHIBIT? OR PH
OTOBLEACH? OR PHOTO(W)BLEACH? OR (COLOR? OR COLOUR?) (2A
)SPECK?

L112 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L96 OR L99

L113 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L112 AND (L109 OR
L110 OR L111)

L114 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L112 OR L113

L115 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L8

L116 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L10

L117 1554 SEA FILE=HCAPLUS ABB=ON PLU=ON L9

L118 3267 SEA FILE=HCAPLUS ABB=ON PLU=ON L4

L119 8 SEA FILE=HCAPLUS ABB=ON PLU=ON L117 AND (L118 OR
L51)

L120 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L119 AND DETERG?

L121 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L120 OR L114 OR L115
OR L116

=> d 1121 1-10 ibib abs hitstr hitind

L121 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:359470 HCAPLUS

DOCUMENT NUMBER: 143:28361

TITLE: Gelation studies, 3. Comparative monitoring of the gelation process of a thermoreversible gelling system made of xanthan gum and locust bean gum by dynamic light scattering and ¹H NMR spectroscopy

AUTHOR(S): Richter, Sven; Brand, Torsten; Berger, Stefan

CORPORATE SOURCE: Institute of Physical Chemistry and Electrochemistry, Dresden University of Technology, Dresden, D-01062, Germany

SOURCE: Macromolecular Rapid Communications (2005), 26(7), 548-553

CODEN: MRCOE3; ISSN: 1022-1336

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The sol-gel transition of one thermoreversible gelling mixture made of xanthan gum and locust bean gum has been studied by using in situ time-resolved dynamic light scattering (DLS) and measuring the spin-lattice relaxation time T₁ of several protons. A critical dynamical behavior was observed near the sol-gel transition, which is characterized by the presence of power-law spectra over four decades of the delay time in the time-intensity correlation function g₂(t)-1 .apprx. t-μ at 48°C. The increase in T₁ with increasing temperature becomes steeper at 50°C indicating a significant change in the local mobility of one anomeric proton of the xanthan side chain and the anomeric protons of the locust bean gum mannose backbone.

CC 44-7 (Industrial Carbohydrates)

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L121 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:606531 HCAPLUS

DOCUMENT NUMBER: 141:142228

TITLE: Laundry detergent compositions containing locust bean gum graft polymer as antiredeposition agent

INVENTOR(S): Gibbs, Christopher David; Parry, Alyn James; Rogers, Susanne Henning

PATENT ASSIGNEE(S): Unilever Plc, UK; Unilever Nv; Hindustan Lever Limited

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004063317	A1	20040729	WO 2003-EP14522	2003 1218

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG,

ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
 KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
 MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,
 RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT,
 TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW,
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY,
 CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
 NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA,
 GN, GQ, GW, ML, MR, NE, SN, TD, TG
 CA 2512830 AA 20040729 CA 2003-2512830 2003
 1218
 AU 2003288257 A1 20040810 AU 2003-288257 2003
 1218
 EP 1623002 A1 20060208 EP 2003-780155 2003
 1218
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
 MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK
 US 2004152619 A1 20040805 US 2004-759417 2004
 0116
 PRIORITY APPLN. INFO.: GB 2003-1022 A 2003
 0116
 WO 2003-EP14522 W 2003
 1218

AB Incorporation in a laundry detergent composition of
 a graft polymer having a locust bean
 gum backbone and grafts of an aromatic sulfonic
 acid improves antiredeposition properties. The preferred polymer
 is locust bean gum graft
 poly(4-styrenesulfonic acid). A built laundry
 detergent composition comprises: (a) from 5 to 60 wt% of an
 organic detergent surfactant selected from
 anionic, nonionic, cationic,
 zwitterionic and amphoteric surfactants
 and combinations thereof; (b) from 10 to 80 wt% of a
 detergency builder; (c) from 0.1 to 10 wt% of a graft
 polymer having a locust bean gum
 backbone and grafts of an aromatic sulfonic acid; (d)
 optionally other detergent ingredients to 100 wt%.

IT 727730-06-5P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
 or engineered material use); PREP (Preparation); USES (Uses)
 (laundry detergent compns. containing
 locust bean gum graft polymer as
 antiredeposition agent)

RN 727730-06-5 HCAPLUS

CN Carob gum, polymer with 4-ethenylbenzenesulfonic acid, graft (9CI)
 (CA INDEX NAME)

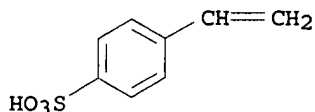
CM 1

CRN 9000-40-2
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 98-70-4
CMF C8 H8 O3 S



IT 727737-90-8P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation);
PREP (Preparation); RACT (Reactant or reagent)
(laundry detergent compns. containing
locust bean gum graft polymer as
antiredeposition agent)
RN 727737-90-8 HCAPLUS
CN Carob gum, 2-methylpropanoate (9CI) (CA INDEX NAME)

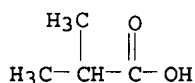
CM 1

CRN 9000-40-2
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

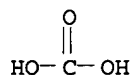
CM 2

CRN 79-31-2
CMF C4 H8 O2



IT 9000-40-2, Locust bean gum
RL: RCT (Reactant); RACT (Reactant or reagent)
(laundry detergent compns. containing
locust bean gum graft polymer as
antiredeposition agent)
RN 9000-40-2 HCAPLUS
CN Carob gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT 497-19-8, Sodium carbonate, uses
1344-09-8, Sodium silicate
7757-82-6, Sodium sulphate, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(laundry detergent compns. containing
locust bean gum graft polymer as
antiredeposition agent)
RN 497-19-8 HCAPLUS
CN Carbonic acid disodium salt (8CI, 9CI) (CA INDEX NAME)

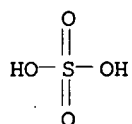


●2 Na

RN 1344-09-8 HCAPLUS
 CN Silicic acid, sodium salt (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 7757-82-6 HCAPLUS
 CN Sulfuric acid disodium salt (8CI, 9CI) (CA INDEX NAME)



●2 Na

IC ICM C11D003-37
 CC 46-5 (Surface Active Agents and Detergents)
 ST **locust bean gum** styrenesulfonic acid
 graft copolymer **laundry detergent**;
 antiredeposition agent **locust bean gum**
 graft **laundry detergent**
 IT Textiles
 (cotton; **laundry detergent** compns. containing
locust bean gum graft polymer as
 antiredeposition agent)
 IT **Zeolites** (synthetic), uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (**detergency builder**; **laundry**
detergent compns. containing **locust bean**
gum graft polymer as antiredeposition agent)
 IT Polyester fibers, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (fabrics; **laundry detergent** compns. containing
locust bean gum graft polymer as
 antiredeposition agent)
 IT **Detergents**
 (**laundry, granular**; **laundry**
detergent compns. containing **locust bean**
gum graft polymer as antiredeposition agent)
 IT **Detergents**
 (**laundry, liquid**; **laundry**
detergent compns. containing **locust bean**
gum graft polymer as antiredeposition agent)
 IT 727730-06-5P
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
 or engineered material use); PREP (Preparation); USES (Uses)
 (**laundry detergent** compns. containing
locust bean gum graft polymer as
 antiredeposition agent)
 IT 727737-90-8P
 RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation);
 PREP (Preparation); RACT (Reactant or reagent)

(laundry detergent compns. containing locust bean gum graft polymer as antiredeposition agent)

IT 2052-01-9, 2-Bromoisobutyric acid 9000-40-2,
Locust bean gum
RL: RCT (Reactant); RACT (Reactant or reagent)
(laundry detergent compns. containing locust bean gum graft polymer as antiredeposition agent)

IT 497-19-8, Sodium carbonate, uses
1344-09-8, Sodium silicate
7757-82-6, Sodium sulphate, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(laundry detergent compns. containing locust bean gum graft polymer as antiredeposition agent)

L121 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:606530 HCAPLUS

DOCUMENT NUMBER: 141:142227

TITLE: Laundry detergent compositions containing locust bean gum graft polymer as antiredeposition agent

INVENTOR(S): Gibbs, Christopher David; Parry, Alyn James; Rogers, Susanne Henning

PATENT ASSIGNEE(S): Unilever Plc, UK; Unilever Nv; Hindustan Lever Limited

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004063316	A1	20040729	WO 2003-EP14521	2003 1218

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003293934 A1 20040810 AU 2003-293934

EP 1583814 A1 20051012 EP 2003-789338

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

BR 2003017955 A 20051129 BR 2003-17955

PRIORITY APPLN. INFO.:

GB 2003-1020

2003
1218

A

2003
0116

WO 2003-EP14521 W

2003
1218

AB Incorporation in a **laundry detergent** composition of a graft polymer having a **locust bean gum backbone** and grafts of an aromatic sulfonic acid improves antiredeposition properties. The preferred polymer is **locust bean gum graft poly(4-styrenesulfonic acid)**.

IT 727730-06-5P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (**laundry detergent** compns. containing **locust bean gum graft polymer** as antiredeposition agent)

RN 727730-06-5 HCAPLUS

CN Carob gum, polymer with 4-ethenylbenzenesulfonic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 9000-40-2

CMF Unspecified

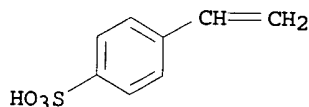
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 98-70-4

CMF C8 H8 O3 S



IT 727737-90-8P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (**laundry detergent** compns. containing **locust bean gum graft polymer** as antiredeposition agent)

RN 727737-90-8 HCAPLUS

CN Carob gum, 2-methylpropanoate (9CI) (CA INDEX NAME)

CM 1

CRN 9000-40-2

CMF Unspecified

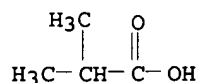
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-31-2

CMF C4 H8 O2



IT 9000-40-2, Locust bean gum

RL: RCT (Reactant); RACT (Reactant or reagent)
(laundry detergent compns. containing
locust bean gum graft polymer as
antiredeposition agent)

RN 9000-40-2 HCAPLUS

CN Carob gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 497-19-8, Sodium carbonate, uses

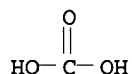
1344-09-8, Sodium silicate

7757-82-6, Sodium sulphate, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(laundry detergent compns. containing
locust bean gum graft polymer as
antiredeposition agent)

RN 497-19-8 HCAPLUS

CN Carbonic acid disodium salt (8CI, 9CI) (CA INDEX NAME)



●2 Na

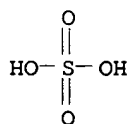
RN 1344-09-8 HCAPLUS

CN Silicic acid, sodium salt (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 7757-82-6 HCAPLUS

CN Sulfuric acid disodium salt (8CI, 9CI) (CA INDEX NAME)



●2 Na

IC ICM C11D003-37

CC 46-5 (Surface Active Agents and Detergents)

ST antiredeposition agent locust bean gum
graft polystyrenesulfonic acid; laundry detergent
antiredeposition agent grafted locust bean
gum

IT Textiles

(cotton; laundry detergent compns. containing
locust bean gum graft polymer as
antiredeposition agent)

IT Zeolites (synthetic), uses

RL: TEM (Technical or engineered material use); USES (Uses)

(detergency builder; laundry
detergent compns. containing locust bean
gum graft polymer as antiredeposition agent)

IT Polyester fibers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(fabrics; laundry detergent compns. containing
locust bean gum graft polymer as
antiredeposition agent)

IT Detergents
(laundry, granular; laundry
detergent compns. containing locust bean
gum graft polymer as antiredeposition agent)

IT Detergents
(laundry, liquid; laundry
detergent compns. containing locust bean
gum graft polymer as antiredeposition agent)

IT 727730-06-5P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical
or engineered material use); PREP (Preparation); USES (Uses)
(laundry detergent compns. containing
locust bean gum graft polymer as
antiredeposition agent)

IT 727737-90-8P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation);
PREP (Preparation); RACT (Reactant or reagent)
(laundry detergent compns. containing
locust bean gum graft polymer as
antiredeposition agent)

IT 2052-01-9, 2-Bromoisobutyric acid 9000-40-2,
Locust bean gum
RL: RCT (Reactant); RACT (Reactant or reagent)
(laundry detergent compns. containing
locust bean gum graft polymer as
antiredeposition agent)

IT 497-19-8, Sodium carbonate, uses
1344-09-8, Sodium silicate
7757-82-6, Sodium sulphate, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(laundry detergent compns. containing
locust bean gum graft polymer as
antiredeposition agent)

L121 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:411777 HCAPLUS

DOCUMENT NUMBER: 140:408392

TITLE: Hydrophilic coating compositions, dew
condensation prevention agents and method
therewith

INVENTOR(S): Tanaka, Hiroki; Iimura, Naoto; Yoshikawa, Jun;
Kanno, Mitsumasa

PATENT ASSIGNEE(S): Toto Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004143443	A2	20040520	JP 2003-335817	2003 0926

PRIORITY APPLN. INFO.: JP 2002-285364 A 2002

0930

AB Title compns. contain (a) water-soluble natural tackifying polysaccharides, (b) hydrophilic metal oxide particles, (c) nonionic, **anionic**, **cationic**, **amphoteric** and/or fluoro **surfactants**, and (d) solvents. An aqueous composition containing Kelzan 0.02, Snowtex 3, polyoxyethylene alkyl ether 0.1, and EtOH 20 parts showed good storage stability at 50° over 3 mo and was spread on a glass plate and dried at room temp for 5 min to form a transparent film with haze 0.06%, water-contact angle of 4.7°, and long-lasting dew condensation prevention.

IT 11078-30-1, **Galactomannan** 11138-66-2, Kelzan
RL: TEM (Technical or engineered material use); USES (Uses) (natural **polysaccharide** tackifier-, hydrophilic metal oxide-, and surfactant-containing aqueous coatings as dew condensation preventers)

RN 11078-30-1 HCAPLUS
CN D-Galacto-D-mannan (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 11138-66-2 HCAPLUS
CN Xanthan gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IC ICM C09D201-00
ICS C09D005-00; C09D105-00; C09K003-00; C09K003-18
CC 42-13 (Coatings, Inks, and Related Products)
IT **Amine oxides**
Amino acids, uses
Esters, uses
Ethers, uses
Phosphates, uses
Quaternary ammonium compounds, uses
Sulfates, uses
RL: TEM (Technical or engineered material use); USES (Uses) (surfactants; natural polysaccharide tackifier-, hydrophilic metal oxide-, and surfactant-containing aqueous coatings as dew condensation preventers)

IT 9000-30-0, Guar gum 11078-30-1, **Galactomannan** 11138-66-2, Kelzan 25322-68-3D, alkyl ether (sodio sulfate) derivs.
RL: TEM (Technical or engineered material use); USES (Uses) (natural **polysaccharide** tackifier-, hydrophilic metal oxide-, and surfactant-containing aqueous coatings as dew condensation preventers)

L121 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:565310 HCAPLUS
DOCUMENT NUMBER: 140:237334
TITLE: The use of nonionic **galactomannan polysaccharides** for stabilisation of ASA emulsions
AUTHOR(S): Koskela, Juha P.; Hormi, Osmo E. O.; Roberts, John C.; Peng, Guomei
CORPORATE SOURCE: Department of Paper Science, University of Manchester Institute of Science and Technology, Manchester, M60 1QD, UK
SOURCE: Appita Journal (2003), 56(3), 213-217
CODEN: APJOES; ISSN: 1038-6807
PUBLISHER: Appita
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Alkenyl succinic anhydride (ASA)-galactomannan (guar gum) emulsions with different ASA/galactomannan ratios and different

ASA concns. were prepared under controlled conditions. These ASA-guar gum emulsions were subjected to various treatments using a deposition rotor to evaluate their stability. Deposition expts. showed that the more guar gum used in the emulsion, the more stable was the emulsion. Furthermore, the use of a surfactant in this combination resulted in even less deposition, and a much smaller average particle size of the emulsion. The stability of these ASA emulsions has been studied and compared to ASA emulsions with two cationic starch derivs. as stabilizers. Internal sizing tests using ASA-guar gum emulsions as a sizing agent indicates that these emulsions are usable as a stock sizing agent as well.

CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)

Section cross-reference(s): 44

ST stabilizer alkenyl succinic anhydride nonionic galactomannan emulsion paper size; surfactant **galactomannan polysaccharide** stabilization alkenyl succinic anhydride emulsion

IT Alcohols, uses

RL: TEM (Technical or engineered material use); USES (Uses) (lanolin, **ethoxylated** propoxylated, Lanexol, surfactants; effect of surfactant on preparation and stability of alkenyl succinic anhydride-nonionic guar gum emulsions for paper sizing)

IT 9005-25-8D, Potato starch, functionalized, **cationic**

RL: PRP (Properties) (effect of **surfactant** on preparation and stability of alkenyl succinic anhydride-nonionic guar gum emulsions for paper sizing)

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L121 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:97505 HCAPLUS

DOCUMENT NUMBER: 138:155393

TITLE: Use of compounds in manufacture of graft polymer for cleaning products for laundry applications

INVENTOR(S): Blokzijl, Wilfried; Jones, Christopher Clarkson; Rogers, Susanne Henning; Royles, Brodyck James Lachlan; White, Michael Stephen Unilever P.L.C., UK; Unilever N.V.; Hindustan Lever Limited

SOURCE: PCT Int. Appl., 104 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003010267	A1	20030206	WO 2002-EP7682	2002 0710

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM,

GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 CA 2454382 AA 20030206 CA 2002-2454382

EP 1409629 A1 20040421 EP 2002-762338 2002
 0710

EP 1409629 B1 20051019 2002
 0710
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
 MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,
 EE, SK

BR 2002011299 A 20040914 BR 2002-11299 2002
 0710
 AT 307189 E 20051115 AT 2002-762338 2002
 0710

US 2004171513 A1 20040902 US 2004-484392 2002
 0710

PRIORITY APPLN. INFO.: GB 2001-17768 A 2004
 0120
 2001
 0720

WO 2002-EP7682 W 2002
 0710

AB Laundry treatment products comprise a graft polymer benefit agent and ≥ 1 addnl. laundry cleaning ingredient. The graft polymer benefit agent preferably provides soil release or fabric care benefits. The graft polymer benefit agent comprises a polysaccharide backbone and graft chains extending from the backbone, each graft chain having a number-average mol. weight 1000-200,000. The graft polymer is substantially free of crosslinking and has a degree of substitution of grafts (across a bulk sample) 1-2. The graft polysaccharide copolymers may be prepared using atom transfer radical polymerization techniques which provide control over the degree of substitution, the graft/co-block composition, and structure.

IT 494866-88-5
 RL: TEM (Technical or engineered material use); USES (Uses)
 (fabric care agent; graft polysaccharide soil release agent for
 laundering of fabrics)
 RN 494866-88-5 HCAPLUS
 CN Carob gum, polymer with 2-(dimethylamino)ethyl
 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

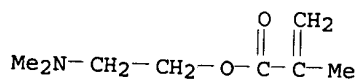
CM 1

CRN 9000-40-2
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 2867-47-2
 CMF C8 H15 N O2



03/29/2006

IT 494866-79-4P 494866-82-9P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(graft polysaccharide soil release agent for laundering of fabrics)

RN 494866-79-4 HCAPLUS

CN Cellulose, polymer with sodium 4-ethenylbenzenesulfonate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

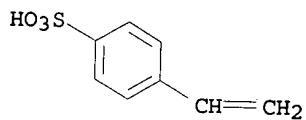
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 2695-37-6

CMF C8 H8 O3 S . Na



● Na

RN 494866-82-9 HCAPLUS

CN Carob gum, polymer with sodium 2-methyl-2-propenoate, graft (9CI)
(CA INDEX NAME)

CM 1

CRN 9000-40-2

CMF Unspecified

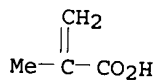
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 5536-61-8

CMF C4 H6 O2 . Na



● Na

IT 494866-84-1

RL: TEM (Technical or engineered material use); USES (Uses)
(graft polysaccharide soil release agent for laundering of fabrics)

RN 494866-84-1 HCAPLUS

CN Carob gum, polymer with sodium 4-ethenylbenzenesulfonate, graft
(9CI) (CA INDEX NAME)

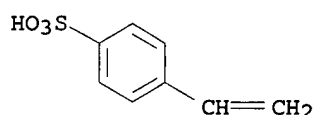
CM 1

CRN 9000-40-2
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 2695-37-6
CMF C8 H8 O3 S . Na



● Na

IC ICM C11D003-37
ICS C11D003-22; C08F251-00; C08F251-02; C08L051-02
CC 46-5 (Surface Active Agents and Detergents)
Section cross-reference(s): 35
ST graft **polymer soil release** fabric
care agent detergent
IT 494866-86-3 **494866-88-5** 494866-91-0 494866-93-2
494866-95-4 494866-97-6
RL: TEM (Technical or engineered material use); USES (Uses)
(fabric care agent; graft polysaccharide soil release agent for
laundering of fabrics)
IT **494866-79-4P 494866-82-9P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered
material use); PREP (Preparation); USES (Uses)
(graft polysaccharide soil release agent for laundering of
fabrics)
IT **494866-84-1**
RL: TEM (Technical or engineered material use); USES (Uses)
(graft polysaccharide soil release agent for laundering of
fabrics)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L121 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:97454 HCAPLUS
DOCUMENT NUMBER: 138:139071
TITLE: Polysaccharide graft polymers and their
synthesis using macroinitiators
INVENTOR(S): Rogers, Susanne Henning; Royles, Brodyck James
Lachlan; White, Michael Stephen
PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever NV; Hindustan Lever
Limited
SOURCE: PCT Int. Appl., 78 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003010206	A1	20030206	WO 2002-EP7683	

2002
0710

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ,
CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ,
EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID,
IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ,
BY, KG

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT,
BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2446375 AA 20030206 CA 2002-2446375

EP 1414867	A1	20040506	EP 2002-754864	2002 0710
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				2002 0710
BR 2002008670	A	20040803	BR 2002-8670	

US 2004176534	A1	20040909	US 2004-484295	2002 0710
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PRIORITY APPLN. INFO.:

GB 2001-17767 A

0120
2001
0720

WO 2002-EP7683 W
2002
0710

AB The invention relates to polysaccharide graft polymers useful for incorporation as benefit agents in laundry **detergent** and fabric treatment compns., and their preparation. The invention also relates to substituted polysaccharides useful as macroinitiator intermediates for the preparation of the polysaccharide graft polymers, and the preparation of the macroinitiators. The polysaccharide graft polymers may be used, for example, to impart soil release and/or fabric care benefits to laundry **detergent** or fabric treatment compns.

IT 67351-38-6P, Cellulose acetate isobutyrate
 RL: CAT (Catalyst use); IMF (Industrial manufacture); RCT
 (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES
 (Uses)

(polysaccharide graft polymers and their synthesis using macroinitiators)

RN 67351-38-6 HCAPLUS

CN Cellulose, acetate 2-methylpropanoate (9CI) (CA INDEX NAME)

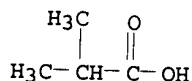
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CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

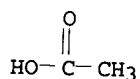
CM 2

CRN 79-31-2
CMF C4 H8 O2



CM 3

CRN 64-19-7
CMF C2 H4 O2



IT 9000-40-2D, Locust Bean gum, substituted
RL: CAT (Catalyst use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
(polysaccharide graft polymers and their synthesis using macroinitiators)
RN 9000-40-2 HCAPLUS
CN Carob gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 492449-47-5P 492998-48-8P, Cellulose acetate isobutyrate-styrene 4-sulfonic acid sodium salt graft copolymer
RL: IMF (Industrial manufacture); PREP (Preparation)
(polysaccharide graft polymers and their synthesis using macroinitiators)
RN 492449-47-5 HCAPLUS
CN Carob gum, polymer with 2-methyl-2-propenoic acid, graft (9CI) (CA INDEX NAME)

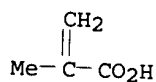
CM 1

CRN 9000-40-2
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-41-4
CMF C4 H6 O2

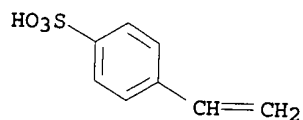


RN 492998-48-8 HCAPLUS
CN Cellulose, acetate 2-methylpropanoate, polymer with sodium 4-ethenylbenzenesulfonate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 2695-37-6

CMF C8 H8 O3 S . Na



CM 2

CRN 67351-38-6

CMF C4 H8 O2 . x C2 H4 O2 . x Unspecified

CM 3

CRN 9004-34-6

CMF Unspecified

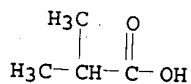
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 79-31-2

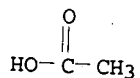
CMF C4 H8 O2



CM 5

CRN 64-19-7

CMF C2 H4 O2



IC ICM C08B037-00
 ICS C08B003-14; C08B011-06; C08B011-18; C08B015-06; C08B015-00;
 C08B031-00; C08B031-04; C08B031-08; C08B037-14; C08B003-22;
 C08B007-00; C08B011-193; C08B011-20; C08B013-00
 CC 44-5 (Industrial Carbohydrates)
 IT **Detergents**
 (laundry; polysaccharide graft polymers and their synthesis
 using macroinitiators)
 IT 67351-38-6P, Cellulose acetate isobutyrate
 RL: CAT (Catalyst use); IMF (Industrial manufacture); RCT
 (Reactant); PREP (Preparation); RACT (Reactant or reagent); USES

(Uses)

(polysaccharide graft polymers and their synthesis using macroinitiators)

- IT 9000-30-0D, Guar gum, substituted 9000-40-2D, Locust Bean gum, substituted 9004-32-4D, Carboxymethylcellulose, substituted 9004-34-6D, Cellulose, substituted 9004-35-7D, Cellulose acetate, substituted 9004-41-5D, Cyanoethyl cellulose, substituted 9004-57-3D, Ethyl cellulose, substituted 9004-62-0D, Hydroxyethylcellulose, substituted 9004-64-2D, Hydroxypropylcellulose, substituted 9004-67-5D, Methylcellulose, substituted 9012-76-4D, Chitosan, substituted 9032-43-3D, Cellulose sulfate, substituted 9032-46-6D, Sulfoethyl cellulose, substituted 11078-30-1, Galactomannan 11078-31-2D, Glucomannan, substituted 11138-66-2D, Xanthan gum, substituted 37220-17-0D, Konjac glucomannan, substituted 37294-28-3D, Xyloglucan, substituted
- RL: CAT (Catalyst use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)

(polysaccharide graft polymers and their synthesis using macroinitiators)

- IT 492449-47-5P 492998-48-8P, Cellulose acetate isobutyrate-styrene 4-sulfonic acid sodium salt graft copolymer
- RL: IMF (Industrial manufacture); PREP (Preparation)

(polysaccharide graft polymers and their synthesis using macroinitiators)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L121 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:132153 HCAPLUS

DOCUMENT NUMBER: 130:295799

TITLE: Viscosity of solutions of xanthan/locust bean gum mixtures

AUTHOR(S): Casas, J. A.; Garcia-Ochoa, F.

CORPORATE SOURCE: Dpto Ingenieria Quimica, Facultad CC Quimicas, Universidad Complutense, Madrid, 28040, Spain

SOURCE: Journal of the Science of Food and Agriculture (1999), 79(1), 25-31

CODEN: JSFAAE; ISSN: 0022-5142

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

- AB Xanthan and locust bean gums are polysaccharides able to produce aqueous solns. with high viscosity and non-Newtonian behavior. When these solns. are mixed a dramatic increase on viscosity is observed, much greater than the combined viscosity of the separated polysaccharide solns. In this work, the influences of different variables on the viscosity of solns. of mixts. of xanthan/locust bean gum were studied. Total polysaccharide concentration, xanthan and locust bean ratio on mixture and temperature at which the gum was dissolved (dissoln. temperature) for both xanthan and locust bean gums have been considered. Under these different operational mixture conditions shear rate and time have also been considered to describe the rheol. behavior of the solns. studied. The high viscosity increase observed in these mixts. is due to the interaction between xanthan gum and locust bean gum mols. This interaction takes place between the side chains of xanthan and the backbone of the locust bean gum. Both xanthan mol. conformation in solution - tertiary structure - and locust bean gum structure show great influence on the final viscosity of the solution mixts. Xanthan conformation changes with temperature, going from ordered structures to disordered or chaotic ones. Locust bean gum composition changes with dissoln. temperature, showing a dissolved galactose/mannose ratio reduction when temperature increases, ie the smooth regions - zones without galactose

radicals - are predominantly dissolved. The highest viscosity was obtained for the solution mixture with a total polysaccharide concentration of 1.5 kg/m³ and a xanthan/locust ratio of 2:4 (weight/weight) and when xanthan gum and locust bean gum were dissolved at 40 and 80°, resp.

CC 17-11 (Food and Feed Chemistry)

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L121 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1989:213227 HCAPLUS

DOCUMENT NUMBER: 110:213227

TITLE: Conformational aspects of xanthan-galactomannan gelation

AUTHOR(S): Cheetham, Norman W. H.; Mashimba, Ernest N. M.
CORPORATE SOURCE: Sch. Chem., Univ. New South Wales, Kensington, 2033, Australia

SOURCE: Carbohydrate Polymers (1988), 9(3), 195-212

CODEN: CAPOD8; ISSN: 0144-8617

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Gel melting temps. were used to probe some aspects of the mechanism of gel formation between xanthan gum and locust bean (carob) gum. Homogeneous gels form in water between the disordered form of xanthan and locust bean gum. In salt solns., gel islands initially form, but can be converted to homogeneous gels by heating above the xanthan order-disorder transition temperature. Dialysis of gel islands also results in homogeneous gels. It is proposed that in water, junction zones are formed between the xanthan backbone in the flat ribbon (cellulosic) conformation and the locust bean gum backbone in a similar conformation. In the presence of salt, intermol. assocns. occur which raise the gel m.p. above that in water alone.

CC 33-5 (Carbohydrates)

L121 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1975:412693 HCAPLUS

DOCUMENT NUMBER: 83:12693

TITLE: Polysaccharide-containing thixotropic fluids

INVENTOR(S): Kawamata, Tadanao

PATENT ASSIGNEE(S): Jec Enterprise Co. Ltd.

SOURCE: Ger. Offen., 20 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2427035	A1	19750116	DE 1974-2427035	1974 0605
JP 50012146	A2	19750207	JP 1973-63497	1973 0606
JP 50012147	A2	19750207	JP 1973-63498	1973 0606
JP 50012148	A2	19750207	JP 1973-63499	1973 0606
FR 2243228	A1	19750404	FR 1974-19412	1974

PRIORITY APPLN. INFO.: JP 1973-63497 A 0605
 1973
 0606

JP 1973-63498 A
 1973
 0606

JP 1973-63499 A
 1973
 0606

AB A stable thixotropic liquid composition, capable of fireproofing clothing, extinguishing fires, and purifying waste gases, contained polysaccharides of the galactose and/or glucose type dispersed in a medium consisting of H₂O, glycols (such as propylene glycol, polyethylene glycol, or polypropylene glycol), sugar alcs. (such as sorbitol, glycerin, or raffinol), and an anionic or nonionic surfactant with an HLB >5 and a penetration value <40 sec. For example, a mixture was prepared and stirred containing glycerin 62, xanthan gum (a glucoside) 16, galactomannan 16, and polysaccharides 32 parts. An aqueous solution containing nonylphenol 5, alkyl laurylamine 1, and alkylbenzenesulfonic acid neutralized with triethanolamine 2 parts was then added to the mixture. The dispersion contained 0.5% surfactant and had an HLB of 18 and a surface tension of 28 dynes/cm.

IT 9040-29-3 11078-30-1 11138-66-2
 RL: USES (Uses)
 (polysaccharide fluids containing, thixotropic)

RN 9040-29-3 HCAPLUS

CN D-Galacto-D-glucoside (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 11078-30-1 HCAPLUS

CN D-Galacto-D-glucoside (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 11138-66-2 HCAPLUS

CN Xanthan gum (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IC C09K; D06M; A62D

CC 44-1 (Industrial Carbohydrates)

ST polysaccharide thixotropic fluid; galactomannan thixotropic fluid; xanthan gum polysaccharide fluid; surfactant polysaccharide thixotropic fluid

IT **Surfactants**
 (anionic and nonionic, polysaccharide fluids containing, thixotropic)

IT 50-70-4 56-81-5, uses and miscellaneous 57-50-1D, α -D-Glucopyranoside, β -D-fructofuranosyl, fatty acid esters 57-55-6, uses and miscellaneous 139-96-8 1331-61-9
 9002-92-0 9004-98-2 9005-64-5 9040-29-3
 11078-30-1 11078-31-2 11138-66-2 25154-52-3
 25155-19-5D, Naphthalenesulfonic acid, alkyl derivs. 25322-68-3
 RL: USES (Uses)
 (polysaccharide fluids containing, thixotropic)

=>

WEST Search History

DATE: Tuesday, March 28, 2006

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Definition, Editing, Browsing

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